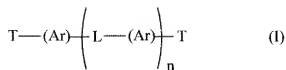


Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1.(previously presented) A lubricating oil composition comprising a major amount of an oil of lubricating viscosity; a minor amount of a high molecular weight, nitrogen-containing dispersant; and a minor amount of an oligomer of the formula:



wherein each Ar independently represents an aromatic moiety selected from polynuclear heterocyclic moieties, said aromatic moiety being optionally substituted by 1 to 6 substituents selected from H, -OR₁, -N(R₁)₂, F, Cl, Br, I, -(L-(Ar)-T), -S(O)_wR₁, -(CZ)_x-(Z)_y-R₁ and -(Z)_y-(CZ)_x-R₁, wherein w is 0 to 3, each Z is independently O, -N(R₁)₂ or S, x and y are independently 0 or 1 and each R₁ is independently H or a linear or branched, saturated or unsaturated hydrocarbyl group having from 1 to about 200 carbon atoms, optionally mono- or poly-substituted with one or more groups selected from -OR₂, -N(R₂)₂, F, Cl, Br, I, -S(O)_xR₂, -(CZ)_x-(Z)_y-R₂ and -(Z)_y-(CZ)_x-R₂, wherein w, x, y and Z are as defined above and R₂ is a hydrocarbyl group having 1 to about 200 carbon atoms;

each L is independently a linking moiety comprising a carbon-carbon single bond or a linking group;

each T is independently H, OR₁, N(R₁)₂, F, Cl, Br, I, S(O)_wR₁, (CZ)_x-(Z)_y-R₁ or (Z)_y-(CZ)_x-R₁, wherein R₁, w, x, y and Z are as defined above; and

n is 2 to about 1000;

wherein at least 25% of aromatic moieties (Ar) are connected to at least 2 linking moieties (L) and a ratio of the total number of aliphatic carbon atoms in the oligomer to the total number of aromatic ring atoms in aromatic moieties (Ar) is from about 0.10:1 to about 40:1.

2.(original) The lubricating oil composition of claim 1, wherein said ratio of the total number of aliphatic carbon atoms in the oligomer to the total number of aromatic ring atoms in aromatic moieties (Ar) is from about 4:1 to about 7:1.

3.(original) The lubricating oil composition of claim 1, wherein at least 60% of aromatic moieties (Ar) are substituted.

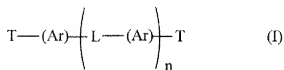
4.(original) The lubricating oil composition of claim 1, wherein hydrocarbyl groups R₁ and R₂ have from 1 to about 30 carbon atoms.

5.(original) The lubricating oil composition of claim 1, wherein each of said linking moieties (L) is independently selected from an alkylene linkage, an ether linkage, an ester linkage, an anhydride linkage, an ether-acyl linkage, an ether ester linkage, an acyl-ester linkage, an amino linkage, an amido linkage, a carbamido linkage, a urethane linkage and a sulfur linkage, each of the linkage groups being optionally mono- or polysubstituted with OR₁, N(R₁)₂, F, Cl, Br, I, S(O)_wR₁, (CZ)_x-(Z)_y-R₁ or (Z)_y-(CZ)_x-R₁, wherein w, Z and R₁ are as defined in claim 1.

6.(original) The lubricating oil composition of claim 5, wherein said linkage moieties are selected from alkylene linkages -CH₂CHC(CH₃)₂- and -C(CH₃)₂-, diacyl linkages-COCO- and -CO(CH₂)₄CO-, and sulfur linkages -S₁- and -S₂-.

7.(original) The lubricating oil composition of claim 1, wherein said high molecular weight dispersant is present in an amount providing from about 0.008 to about 0.32 wt. % of nitrogen, and said oligomer is present in an amount of from about 0.005 to about 10 wt. %, based on the total weight of lubricating oil composition.

8.(previously presented) An oligomer of the formula:



wherein each Ar independently represents an aromatic moiety selected from polynuclear heterocyclic moieties, said aromatic moiety being optionally substituted by 1 to 6 substituents selected from H, -OR₄, -N(R₄)₂, F, Cl, Br, I, -(L-(Ar)-T), -S(O)_wR₄, -(CZ)_x-(Z)_y-R₄ and -(Z)_y-(CZ)_x-R₄, wherein w is 0 to 3, each Z is independently O, -N(R₄)₂ or S, x and y are independently

0 or 1 and each R_z is independently H, methyl, ethyl, propyl or a branched hydrocarbyl group having 3 to 200 carbon atoms, optionally mono- or poly-substituted with one or more groups selected from $-OR_4$, $-N(R_4)_2$, F, Cl, Br, I, $-S(O)_wR_4$, $-(CZ)_x-(Z)_y-R_4$ and $-(Z)_x-(CZ)_y-R_4$, wherein w, x, y and Z are as defined above;

each L is independently a linking moiety comprising a carbon-carbon single bond or a linking group;

each T is independently H, OR_4 , $N(R_4)_2$, F, Cl, Br, I, $S(O)_wR_4$, $(CZ)_x-(Z)_y-R_4$ or $(Z)_x-(CZ)_y-R_4$, wherein R_4 , w, x, y and Z are as defined above; and

n is 2 to about 1000;

wherein at least 25% of aromatic moieties (Ar) are connected to at least 2 linking moieties (L) and a ratio of the total number of aliphatic carbon atoms in the oligomer to the total number of aromatic ring atoms in aromatic moieties (Ar) is from about 0.10:1 to about 40:1.

9.(original) The oligomer of claim 8, wherein said ratio of the total number of aliphatic carbon atoms in the oligomer to the total number of aromatic ring atoms in aromatic moieties (Ar) is from about 4:1 to about 7:1.

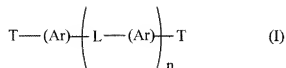
10.(original) The oligomer of claim 8, wherein at least 60% of aromatic moieties (Ar) are substituted.

11.(original) The oligomer of claim 8, wherein hydrocarbyl groups R_4 and R_5 have from 1 to about 30 carbon atoms.

12.(original) The oligomer of claim 8, wherein each of said linking moieties (L) is independently selected from an alkylene linkage, an ether linkage, an ester linkage, an anhydride linkage, an ether-acyl linkage, an ether ester linkage, an acyl-ester linkage, an amino linkage, an amido linkage, a carbamido linkage, a urethane linkage and a sulfur linkage, each of the linkage groups being optionally mono- or polysubstituted with OR_1 , $N(R_1)_2$, F, Cl, Br, I, $S(O)_wR_1$, $(CZ)_x-(Z)_y-R_1$ or $(Z)_x-(CZ)_y-R_1$, wherein w, Z and R_1 are as defined in claim 1.

13.(original) The oligomer of claim 12, wherein said linkage moieties are selected from alkylene linkages $-CH_2CH_2CH_2-$ and $-C(CH_3)_2-$, diacyl linkages $-COCO-$ and $-CO(CH_2)_4CO-$, and sulfur linkages $-S_1-$ and $-S_2-$.

14.(currently amended) A lubricating oil composition comprising a major amount of an oil of lubricating viscosity; a minor amount of a high molecular weight, nitrogen-containing dispersant; and a minor amount of an oligomer of the formula:



wherein each Ar independently represents an aromatic moiety selected from mononuclear heterocyclic moieties, said aromatic moiety being optionally substituted by 1 to 6 substituents selected from H, -OR₁, -N(R₁)₂, F, Cl, Br, I, -(L-(Ar)-T), -S(O)_wR₁, -(CZ)_x-(Z)_y-R₁ and -(Z)_y-(CZ)_x-R₁, wherein w is 0 to 3, each Z is independently O, -N(R₁)₂ or S, x and y are independently 0 or 1 and each R₁ is independently H or a linear or branched, saturated or unsaturated hydrocarbyl group having from 1 to about 200 carbon atoms, optionally mono- or poly-substituted with one or more groups selected from -OR₂, -N(R₂)₂, F, Cl, Br, I, -S(O)_wR₂, -(CZ)_x-(Z)_y-R₂ and -(Z)_y-(CZ)_x-R₂, wherein w, x, y and Z are as defined above and R₂ is a hydrocarbyl group having 1 to about 200 carbon atoms;

each L is independently a linking moiety comprising a carbon-carbon single bond or a linking group selected from an alkylene linkage, an ether linkage, an ester linkage, an anhydride linkage, an ether-acyl linkage, an ether ester linkage, an acyl ester linkage, an amino linkage, an amide linkage, a carbamido linkage, a urethane diacyl linkage and a sulfur linkage, each of the linkage groups being optionally mono- or polysubstituted with OR₁, N(R₁)₂, F, Cl, Br, I, S(O)_wR₁, (CZ)_x-(Z)_y-R₁ or (Z)_y-(CZ)_x-R₁, wherein w, Z and R₁ are as defined above;

each T is independently H, OR₁, N(R₁)₂, F, Cl, Br, I, S(O)_wR₁, (CZ)_x-(Z)_y-R₁ or (Z)_y-(CZ)_x-R₁, wherein R₁, w, x, y and Z are as defined above; and
n is 2 to about 1000;

wherein at least 25% of aromatic moieties (Ar) are connected to at least 2 linking moieties (L) and a ratio of the total number of aliphatic carbon atoms in the oligomer to the total number of aromatic ring atoms in aromatic moieties (Ar) is from about 0.10:1 to about 40:1.

15.(previously presented) The lubricating oil composition of claim 14, wherein said ratio of the total number of aliphatic carbon atoms in the oligomer to the total number of aromatic ring atoms in aromatic moieties (Ar) is from about 4:1 to about 7:1.

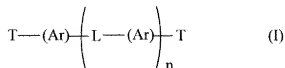
16.(previously presented) The lubricating oil composition of claim 14, wherein at least 60% of aromatic moieties (Ar) are substituted.

17.(previously presented) The lubricating oil composition of claim 14, wherein hydrocarbyl groups R₁ and R₂ have from 1 to about 30 carbon atoms.

18.(previously presented) The lubricating oil composition of claim 14, wherein said linkage moieties are selected from alkylene linkages -CH₂CHC(CH₃)₂- and -C(CH₃)₂-, diacyl linkages--COCO- and -CO(CH₂)₂CO-, and sulfur linkages -S₁- and -S₂-.

19.(previously presented) The lubricating oil composition of claim 14, wherein said high molecular weight dispersant is present in an amount providing from about 0.008 to about 0.32 wt. % of nitrogen, and said oligomer is present in an amount of from about 0.005 to about 10 wt. %, based on the total weight of lubricating oil composition.

20.(currently amended) An oligomer of the formula:



wherein each Ar independently represents an aromatic moiety selected from mononuclear heterocyclic moieties, said aromatic moiety being optionally substituted by 1 to 6 substituents selected from H, -OR₄, -N(R₄)₂, F, Cl, Br, I, -(L-(Ar)-T), -S(O)_wR₄, -(CZ)_x-(Z)_y-R₄ and -(Z)_y-(CZ)_x-R₄, wherein w is 0 to 3, each Z is independently O, -N(R₄)₂ or S, x and y are independently 0 or 1 and each R₄ is independently H, methyl, ethyl, propyl or a branched hydrocarbyl group having 3 to 200 carbon atoms, optionally mono- or poly-substituted with one or more groups selected from -OR₄, -N(R₄)₂, F, Cl, Br, I, -S(O)_wR₄, -(CZ)_x-(Z)_y-R₄ and -(Z)_y-(CZ)_x-R₄, wherein w, x, y and Z are as defined above;

each L is independently a linking moiety comprising a carbon-carbon single bond or a linking group selected from an alkylene linkage, an ether linkage, an ester linkage, an anhydride linkage, an ether-acyl linkage, an ether-ester linkage, an acyl-ester linkage, an amino linkage, an amide

~~linkage, a carbamido linkage, a urethane diacyl linkage~~ and a sulfur linkage, each of the linkage groups being optionally mono- or polysubstituted with OR_1 , $N(R_1)_2$, F, Cl, Br, I, $S(O)_wR_1$, $(CZ)_x-(Z)_y-R_1$ or $(Z)_y-(CZ)_x-R_1$, wherein w, Z and R_1 are as defined above;

each T is independently H, OR_1 , $N(R_1)_2$, F, Cl, Br, I, $S(O)_wR_4$, $(CZ)_x-(Z)_y-R_4$ or $(Z)_y-(CZ)_x-R_4$, wherein R_4 , w, x, y and Z are as defined above; and
n is 2 to about 1000;

wherein at least 25% of aromatic moieties (Ar) are connected to at least 2 linking moieties (L) and a ratio of the total number of aliphatic carbon atoms in the oligomer to the total number of aromatic ring atoms in aromatic moieties (Ar) is from about 0.10:1 to about 40:1.

21.(previously presented) The oligomer of claim 20, wherein said ratio of the total number of aliphatic carbon atoms in the oligomer to the total number of aromatic ring atoms in aromatic moieties (Ar) is from about 4:1 to about 7:1.

22.(previously presented) The oligomer of claim 20, wherein at least 60% of aromatic moieties (Ar) are substituted.

23.(previously presented) The oligomer of claim 20, wherein hydrocarbyl groups R_1 and R_5 have from 1 to about 30 carbon atoms.

24.(previously presented) The oligomer of claim 20, wherein said linkage moieties are selected from alkylene linkages $-CH_2CHC(CH_3)_2-$ and $-C(CH_3)_2-$, diacyl linkages $-COCO-$ and $-CO(CH_2)_4CO-$, and sulfur linkages $-S_1-$ and $-S_2-$.